#### III. SUMMARY OF PERFORMANCE RESULTS

Overall, we were successful in achieving 65% – 15 of 23 – of our performance goals.

**RESULTS FOR OUTCOME GOALS:** This is the first year we are reporting on the new outcome goals of People, Ideas, and Tools.

We achieved four of our five outcome goals (80%) in FY 2001. We failed to achieve our goal involving schools participating in systemic initiative programs.

Management Goals	4 of 5 (80%)
<b>Outcome Goals</b>	4 of 5 (80%)
<b>Investment Process Goals</b>	7 of 13 (54%)
TOTAL	15 of 23 (65%)

pleased to have demonstrated the feasibility of implementing a paperless proposal review environment at NSF. Ten programs participated in a pilot program in electronic proposal review in FY 2001, and the pilot program was a success. The one goal we

did not achieve involved distribution of an employee survey to our staff. Our management goals discussion is in Section V.

In assessing our results for People, Ideas, and Tools, external experts noted significant achievement in diversity and broadening participation. However, participation of underrepresented groups remains lower than desired. It was also noted that there was limited involvement of agency programs other than Science Resources Statistics in the development of information fundamental to national policy debates. A complete discussion of our outcome goal results is provided in Section IV.

### RESULTS FOR MANAGEMENT GOALS:

We achieved four of our five management goals (80%) in FY 2001. We are particularly

#### **RESULTS FOR INVESTMENT PROCESS**

GOALS: We achieved seven of our thirteen investment process goals in FY 2001. Areas identified as needing improvement include: the use of the generic merit review criteria by reviewers, decreasing the time to decision, increasing the percentage of awards to new investigators, and keeping operating time lost at facilities due to unscheduled downtime to less than 10% of the total scheduled operating time. Discussion of these goals and how NSF is addressing issues is provided in Section VI.

The following Table provides a summary of the results for NSF's FY 2001 GPRA reporting.

#### III. – Summary of Performance Results

### ANNUAL PERFORMANCE GOALS FOR NSF'S STRATEGIC OUTCOMES

Strategic Outcome	FY 2001 Annual Performance Goal	Results for National Science Foundation
People Strategic Outcome	Performance Goal III-1a:  NSF is successful when, in the aggregate, results reported in the period demonstrate significant achievement in one or more of the following indicators:	New goal in FY 2001  FY 2001: NSF is successful for goal III-1a.
Outcome Goal III-1: Development of "a	Improved mathematics, science, and technology skills for U.S. students at the K-12 level, and for citizens of all ages, so that they can be competitive in a technological society.	Demonstrated significant achievement
diverse, internationally competitive and globally-engaged workforce of scientists, engineers, and well-	<ul> <li>A science and technology and instructional workforce that reflects America's diversity.</li> <li>Globally engaged science and engineering professionals</li> </ul>	Demonstrated significant achievement*      Demonstrated significant achievement
prepared citizens."	<ul> <li>who are among the best in the world.</li> <li>A public that is provided access to the benefits of science and engineering research and education.</li> </ul>	
	FY 2001 Result: Reports prepared by external experts during FY 2001 GPRA reporting provide assessments and retrospective examples of NSF-supported projects that document significant achievement. *A number of these assessments were emphatic that NSF must continue and increase its efforts related to diversity.	
	Performance Goal III-1b:  Over 80 percent of schools participating in systemic initiative programs will (1) implement a standard-based curriculum in science and mathematics; (2) further professional development of the instructional workforce; and (3) improve student achievement on a selected battery of tests, after three years of NSF support.  FY 2001 Result**: The curriculum, instructional workforce, and improved achievement in science components of the goal were successful. However, less than 80% of schools met the goal of improved student achievement in mathematics.  In FY 2002, appropriate technical assistance will be provided to schools not meeting the goal.	FY 1999: NSF successful FY 2000: NSF successful FY 2001: NSF is not successful for goal III-1b**.
	Performance Goal III-1c:  Through systemic initiatives and related teacher enhancement programs, NSF will provide intensive professional development experiences for at least 65,000 pre-college teachers.	FY 1999: NSF successful FY 2000: NSF successful FY 2001: NSF is successful for goal III-1c.
	FY 2001 Result: In school year 1999-2000, EHR awards provided intensive professional development (60 hours or more) to a total of 79,000 teachers, exceeding substantially the GPRA goal of 65,000.	

#### III. – Summary of Performance Results ANNUAL PERFORMANCE GOALS FOR NSF'S STRATEGIC OUTCOMES (continued)

Strategic Outcome	FY 2001 Annual Performance Goal	Results for National Science Foundation
Ideas Strategic Outcome	Performance Goal III-2:	New goal in FY 2001
	NSF is successful when, in the aggregate, results reported in the period demonstrate significant achievement in one or more of the following indicators:	FY 2001: NSF is successful for goal III-2.
Outcome Goal III-2: Enabling "discovery across the frontier of	A robust and growing fundamental knowledge base that enhances progress in all science and engineering areas including the science of learning.	Demonstrated significant achievement
science and engineering, connected to learning, innovation and service to	Discoveries that advance the frontiers of science, engineering and technology.	Demonstrated significant achievement
society."	Partnerships connecting discovery to innovation, learning, and societal advancement.	Demonstrated significant achievement
	Research and education processes that are synergistic.      FY 2001 Result: Reports prepared by external experts during FY 2001 GPRA reporting provide assessments and retrospective examples of NSF-supported projects that document significant achievement.	Demonstrated significant achievement
Tools Strategic Outcome	Performance Goal III-3:	New goal in FY 2001
	NSF is successful when, in the aggregate, results reported in the period demonstrate significant achievement in one or more of the following indicators:	FY 2001: NSF is successful for goal III-3.
Outcome Goal III-3: Providing "broadly accessible, state-of-the art and shared research and education tools."	Shared use platforms, facilities, instruments, and databases that enable discovery and enhance the productivity and effectiveness of the science and engineering workforce.	Demonstrated significant achievement
culcation tools.	Networking and connectivity that take full advantage of the Internet and make SMET information available to all citizens.	Demonstrated significant achievement
	Information and policy analyses that contribute to the effective use of science and engineering resources.	Demonstrated significant achievement*
	FY 2001 Result: Reports prepared by external experts during FY 2001 GPRA reporting provide assessments and retrospective examples of NSF-supported projects that document significant achievement. *There are very limited contributions and limited involvement of agency programs other than Science Resources Statistics (SRS) in developing information and other materials fundamental to national policy debates.	

#### III. – Summary of Performance Results

#### ANNUAL PERFORMANCE GOALS FOR NSF'S MANAGEMENT

Performance Area	FY 2001 Annual Performance Goal	Results for National Science Foundation
NSF Business Practices		
Electronic Proposal Submission	Performance Goal IV-1:  Ninety-five percent of full proposals will be received electronically through FastLane.  FY 1998 Baseline 17% FY 1999 Result 44% FY 2000 Goal 60% FY 2000 Result 81% FY 2001 Goal 95% FY 2001 Result 99%	FY 1999: NSF successful FY 2000: NSF successful FY 2001: NSF is successful for goal IV-1.
Electronic Proposal Processing	Performance Goal IV-2:  In FY 2001, NSF will conduct ten pilot paperless projects that manage the competitive review process in an electronic environment.  FY 2001 Result: Ten pilot paperless projects were completed.	New goal in FY 2001  FY 2001: NSF is successful for goal IV-2.
Video- Conference/Long- Distance Communications	Performance Goal IV-3:  By the end of FY 2001, NSF will increase usage of a broad range of video-conferencing / long distance communications technology by 100 percent over the FY 1999 level.  FY 2001 Result: 142 video-conferences were conducted, an increase of 184 percent over the 1999 level.	New goal in FY 2001  FY 2001: NSF is successful for goal IV-3.
NSF Staff		
Diversity	Performance Goal IV-4:  NSF will show an increase over 1997 in the total number of hires to science and engineering (S&E) positions from underrepresented groups.  FY 1997 Baseline: 16 females and 15 members of underrepresented minority groups were hired.  FY 2000 Result: 35 females and 19 members of underrepresented minority groups were hired.  FY 2001 Result: 38 females and 22 members of underrepresented minority groups were hired.	Goal revised in FY 2000  FY 1999: NSF successful for related goal  FY 2000: NSF successful  FY 2001: NSF is successful for goal IV-4.

# III. – Summary of Performance Results ANNUAL PERFORMANCE GOALS FOR NSF'S MANAGEMENT (continued)

Performance	FY 2001 Annual	Results for
Area	Performance Goal	National Science Foundation
Work Environment	Performance Goal IV-5:  NSF will establish various baselines that will enable management to better assess the quality of worklife and work environment within the Foundation.  FY 2001 Result: Development of an employee survey is underway. This survey will provide baseline information on the quality of worklife and work environment at NSF.  In FY 2002, the survey will be made available to employees.	New goal in FY 2001  FY 2001: NSF is not successful for goal IV-5.

#### III. – Summary of Performance Results

#### ANNUAL PERFORMANCE GOALS FOR NSF'S INVESTMENT PROCESS

Performance Area	FY 2001 Annual Performance Goal	Results for National Science Foundation
Proposal and Award Processes		
Use of Merit Review	Performance Goal V-1:  At least 85 percent of basic and applied research funds will be allocated to projects, which undergo merit review. *  FY 2000 Goal 80% FY 2000 Result 87% FY 2001 Goal 85% FY 2001 Result 88%  *During FY 2000 OMB redefined what constitutes a merit-reviewed project and established a new target level of 70-90%.	Goal revised in FY 2000  FY 1999: NSF successful for related goal  FY 2000: NSF successful  FY 2001: NSF is successful for goal V-1.
Implementation of Merit Review Criteria – Reviewers	Performance Goal V-2:  NSF performance in implementation of the merit review criteria is successful when reviewers address the elements of both generic review criteria.  FY 2001 Result: Program reports prepared by external experts during FY 2001 GPRA reporting provide assessment of implementation of merit review criteria for reviewers. In FY 1998 – FY 2000, reviewers did not consistently address the broader impacts criterion. In FY 2001, NSF added separate review screens to FastLane to enable reviewers to address each merit-review criterion separately. NSF also established an internal task force to examine strategies to improve both proposer and reviewer attention to the broader impacts criterion. A number of FY 2001 reports note that reviewers are making significant progress in utilizing both merit review criteria.  In FY 2002, NSF will continue to develop and apply recommendations that focus on strategies which stress the importance of using both criteria. It will also collect and make available examples of broader impacts and develop a plan to disseminate them.	Goal revised in FY 2001  FY 2001: NSF is not successful for goal V-2.
Implementation of Merit Review Criteria – Program Officers	Performance Goal V-3:  NSF performance in implementation of the merit review criteria is successful when program officers address the elements of both generic review criteria when making their award decisions.  FY 2001 Result: Program reports prepared by external experts during FY 2001 GPRA reporting result in an assessment of successful for the foundation in implementation of both merit review criteria for program managers.	Goal revised in FY 2001  FY 2001: NSF is successful for goal V-3.

# III. – Summary of Performance Results ANNUAL PERFORMANCE GOALS FOR NSF'S INVESTMENT PROCESS (continued)

Performance Area	FY 2001 Annual Performance Goal	Results for National Science Foundation
Customer Service: Time to Prepare Proposals	Performance Goal V-4:  95 percent of program announcements will be available to relevant individuals and organizations at least three months prior to the proposal deadline or target date.  FY 1998 Baseline 66% FY 1999 Result 75% FY 2000 Goal 95% FY 2000 Result 89% FY 2001 Goal 95% FY 2001 Result 100%	FY 1999: NSF not successful FY 2000: NSF not successful FY 2001: NSF is successful for goal V-4.
Customer Service: Time to Decision	Performance Goal V-5: For 70 percent of proposals, be able to tell applicants whether their proposals have been declined or recommended for funding within six months of receipt.  FY 1998 Baseline 59% FY 1999 Result 58% FY 2000 Goal 70% FY 2000 Result 54% FY 2001 Result 62%  FY 2001 Result: In FY 2001, 62% of proposals were processed within 6 months of receipt.  In FY 2002, NSF will continue to focus on improving the efficiency of proposal processing, including the dissemination of best practices to program staff.	FY 1999: NSF not successful FY 2000: NSF not successful FY 2001: NSF is not successful for goal V-5.
Award Size	Performance Goal V-6a:           NSF will increase the average annualized award size for research projects to \$110,000.           FY 1998 Baseline         \$90,000           FY 1999 Result         \$94,000           FY 2000 Result         \$105,800           FY 2001 Goal         \$110,000           FY 2001 Result         \$113,601	New goal in FY 2001  FY 2001: NSF is successful for goal V-6a.

#### III. - Summary of Performance Results

## ANNUAL PERFORMANCE GOALS FOR NSF'S INVESTMENT PROCESS (continued)

Performance Area	FY 2001 Annual Performance Goal	Results for National Science Foundation
Award Duration	Performance Goal V-6b:  NSF will increase the average duration of awards for research projects to at least three years.  FY 1998 Baseline 2.7 years FY 1999 Goal 2.8 years FY 1999 Result 2.8 years FY 2000 Result 2.8 years FY 2001 Goal 3.0 years FY 2001 Result 2.9 years  FY 2001 Result 2.9 years  FY 2001 Result: Resource limitations impacted NSF's ability to achieve both the award size and award duration goals. NSF focused its efforts on increasing average annualized award size.  In FY 2002, NSF will continue to focus on increasing award size and duration in order to improve the efficiency of the research process.	FY 1999: NSF successful FY 2000: Not applicable FY 2001: NSF is not successful for goal V-6b.
Maintaining Openness in the System	Performance Goal V-7:  NSF will award 30 percent of its research grants to new investigators.  FY 1997 Baseline 27% FY 1998 27% FY 1999 Goal 30% FY 1999 Result 27% FY 2000 Goal 30% FY 2000 Result 28% FY 2001 Goal 30% FY 2001 Result 28%  In FY 2002, NSF will continue its outreach to new investigators to promote awareness of research funding and to encourage new investigators to submit proposals.	FY 1999: NSF not successful FY 2000: NSF not successful FY 2001: NSF is not successful for goal V-7.

# III. – Summary of Performance Results ANNUAL PERFORMANCE GOALS FOR NSF'S INVESTMENT PROCESS (continued)

Performance Area	FY 2001 Annual Performance Goal	Results for National Science Foundation
Broadening Participation		
Reviewer Pool	Performance Goal V-8:  NSF will begin to request voluntary demographic data electronically from all reviewers to determine participation levels of members of underrepresented groups in the NSF reviewer pool.  FY 2001 Result: The reviewer system in FastLane was revised to gather voluntary demographic data.	New goal in FY 2001.  FY 2001: NSF is successful for goal V-8.
Facilities Oversight		
Construction and Upgrade	Performance Goal V-9a: For 90 percent of facilities, keep construction and upgrades within annual expenditure plan, not to exceed 110 percent of estimates.  FY 1999 Result: Majority of facilities within 110 percent of annual spending estimates.  FY 2000 Result: Of the 11 construction and upgrade projects, all were within annual expenditure plans; most were under budget.  FY 2001 Result: Of 25 construction and upgrade projects, 24 (96 percent) were within 110 percent of annual expenditure plans.	Goal revised in FY 2001  FY 1999: NSF successful for related goal  FY 2000: NSF successful  FY 2001: NSF is successful for goal V-9a.

#### III. - Summary of Performance Results

## ANNUAL PERFORMANCE GOALS FOR NSF'S INVESTMENT PROCESS (continued)

Performance Area	FY 2001 Annual Performance Goal	Results for National Science Foundation
Construction and Upgrade	Performance Goal V-9b: Ninety percent of facilities will meet all annual schedule milestones by the end of the reporting period.  FY 1999 Result: Majority of facilities on schedule.  FY 2000 Result: Majority (7 of 11) of construction/upgrade projects within the annual schedule goal.  FY 2001 Result: Of the 25 construction and upgrade projects, 21 (84 percent) met all annual schedule milestones by the end of the reporting period.  Project delays were caused in part by circumstances beyond the control of the facility, technical problems and personnel issues.  In FY 2002, NSF will work with awardees to identify obstacles to successful performance and implement plans to avoid or mitigate their consequences in the future.	Goal revised in FY 2001  FY 1999: NSF successful for related goal  FY 2000: NSF not successful for related goal  FY 2001: NSF is not successful for goal V-9b.
Construction and Upgrade	Performance Goal V-9c: For all construction and upgrade projects initiated after 1996, keep total cost within 110 percent of estimates made at the initiation of construction.  FY 2001 Result: One project was completed. The actual total cost was equal to the estimated total cost.	FY 1999 and FY 2000: There were no projects completed, therefore this goal did not apply.  FY 2001: NSF is successful for goal V-9c.
Operations and Management of Facilities	Performance Goal V-10:  For 90 percent of facilities, keep operating time lost due to unscheduled downtime to less than 10 percent of the total scheduled operating time.  FY 1999 Result: Reporting database under development.  FY 2000 Result: Of the 26 reporting facilities, 22 (85%) met the goal of keeping unscheduled downtime to below 10% of the total scheduled operating time.  FY 2001 Result: Of the 29 reporting facilities, 25 (86 percent) met the goal of keeping unscheduled downtime to below 10 percent of the total scheduled operating time.  Some causes of failure were outside the control of the facility or were related to technical problems.  In FY 2002, NSF will continue to work with awardees to identify obstacles to successful performance and develop plans to avoid or mitigate their consequences in the future.	Goal revised in FY 2001  FY 1999: Inconclusive for related goal  FY 2000: NSF not successful for related goal  FY 2001: NSF is not successful for goal V-10.